

What Is Claimed Is:

1 1. A method of supporting a user to access a service, said method being performed
2 in a service selection gateway (SSG), said method comprising:
3 receiving in said SSG, data representing a plurality of switching points;
4 counting in said SSG, a traffic volume from or to each of said plurality of
5 switching points; and
6 sending from said SSG, an accounting record containing said traffic volume.

1 2. The method of claim 1, wherein each of said plurality of switching points
2 comprises a time at which a tariff changes to access said service.

1 3. The method of claim 2, wherein said traffic volume comprises an aggregate
2 count of data transferred.

1 4. The method of claim 2, wherein said traffic volume comprises a marginal count
2 from a previous switching point, said accounting record further comprising an aggregate
3 count.

1 5. The method of claim 4, further comprising maintaining a marginal counter and
2 an aggregate counter to count said marginal count and said aggregate count respectively.

1 6. The method of claim 4, further comprising:

maintaining a single counter to count said aggregate count;
storing said aggregate count in a variable at each of said plurality of switching
points; and
computing said marginal count at a time of generating said accounting record by
subtracting said variable from said aggregate counter at said time.

7. The method of claim 4, wherein said accounting record is sent at least once in
every tariff duration, wherein said tariff duration is between successive ones of said
plurality of switching points.

8. The method of claim 7, wherein said plurality of switching points are specified
for each day.

9. The method of claim 4, wherein said service is billed according to a post-paid
model.

10. The method of claim 4, wherein said traffic volume is associated with a
session initiated by said user.

11. A machine readable medium carrying one or more sequences of instructions
for causing a SSG to support a user to access a service, wherein execution of said one or
more sequences of instructions by one or more processors contained in said SSG causes

4 said one or more processors to perform the actions of:
5 receiving in said SSG, data representing a plurality of switching points;
6 counting in said SSG, a traffic volume from or to each of said plurality of
7 switching points; and
8 sending from said SSG, an accounting record containing said traffic volume.

1 12. The machine readable medium of claim 11, wherein each of said plurality of
2 switching points comprises a time at which a tariff changes to access said service.

1 13. The machine readable medium of claim 12, wherein said traffic volume
2 comprises an aggregate count of data transferred.

1 14. The machine readable medium of claim 12, wherein said traffic volume
2 comprises a marginal count from a previous switching point, said accounting record
3 further comprising an aggregate count.

1 15. The machine readable medium of claim 14, further comprising maintaining
2 a marginal counter and an aggregate counter to count said marginal count and said
3 aggregate count respectively.

1 16. The machine readable medium of claim 14, further comprising:
2 maintaining a single counter to count said aggregate count;

3 storing said aggregate count in a variable at each of said plurality of switching
4 points; and
5 computing said marginal count at a time of generating said accounting record by
6 subtracting said variable from said aggregate counter at said time.

1 17. The machine readable medium of claim 14, wherein said accounting record
2 is sent at least once in every tariff duration, wherein said tariff duration is between
3 successive ones of said plurality of switching points.

1 18. The machine readable medium of claim 17, wherein said plurality of switching
2 points are specified for each day of a week.

1 19. The machine readable medium of claim 14, wherein said service is billed
2 according to a post-paid model.

1 20. The machine readable medium of claim 14, wherein said traffic volume is
2 associated with a session initiated by said user.

1 21. A service selection gateway (SSG) supporting a user to access a service, said
2 SSG comprising:
3 means for receiving data representing a plurality of switching points;
4 means for counting a traffic volume from or to each of said plurality of switching

5 points; and

6 means for sending an accounting record containing said traffic volume.

1 22. The SSG of claim 21, wherein each of said plurality of switching points
2 comprises a time at which a tariff changes to access said service.

1 23. The SSG of claim 22, wherein said traffic volume comprises an aggregate
2 count of data transferred.

1 24. The SSG of claim 22, wherein said traffic volume comprises a marginal count
2 from a previous switching point, said accounting record further comprising an aggregate
3 count.

1 25. The SSG of claim 24, further comprising means for maintaining a marginal
2 counter and an aggregate counter to count said marginal count and said aggregate count
3 respectively.

1 26. The SSG of claim 24, further comprising:
2 means for maintaining a single counter to count said aggregate count;
3 means for storing said aggregate count in a variable at each of said plurality of
4 switching points; and
5 means for computing said marginal count at a time of generating said accounting

6 record by subtracting said variable from said aggregate counter at said time.

1 27. The SSG of claim 24, wherein said accounting record is sent at least once in
2 every tariff duration, wherein said tariff duration is between successive ones of said
3 plurality of switching points.

1 28. The SSG of claim 27, wherein said plurality of switching points are specified
2 for each day.

1 29. The SSG of claim 24, wherein said service is billed according to a post-paid
2 model.

1 30. The SSG of claim 24, wherein said traffic volume is associated with a session
2 initiated by said user.

1 31. A service selection gateway (SSG) supporting a user to access a service, said
2 SSG comprising:

3 a tariff block receiving data representing a plurality of switching points;

4 a forwarding block forwarding a plurality of packets related to said user;

5 an accounting block counting a traffic volume from or to each of said plurality of
6 switching points according to said plurality of packets; and

7 an outbound interface sending an accounting record containing said traffic volume.

1 32. The SSG of claim 31, wherein each of said plurality of switching points
2 comprises a time at which a tariff changes to access said service.

1 33. The SSG of claim 32, wherein said traffic volume comprises an aggregate
2 count of data transferred.

1 34. The SSG of claim 32, wherein said traffic volume comprises a marginal count
2 from a previous switching point, said accounting record further comprising an aggregate
3 count.

1 35. The SSG of claim 34, wherein said accounting block maintains a marginal
2 counter and an aggregate counter to count said marginal count and said aggregate count
3 respectively.

1 36. The SSG of claim 34, wherein said accounting block maintains a single
2 counter to count said aggregate count, said accounting block storing said aggregate count
3 in a variable at each of said plurality of switching points, and computing said marginal
4 count at a time of generating said accounting record by subtracting said variable from said
5 aggregate counter at said time.

1 37. The SSG of claim 34, wherein said accounting record is sent at least once in

2 every tariff duration, wherein said tariff duration is between successive ones of said
3 plurality of switching points.

1 38. The SSG of claim 37, wherein said plurality of switching points are specified
2 for each day.

1 39. The SSG of claim 34, wherein said service is billed according to a post-paid
2 model.

1 40. The SSG of claim 34, wherein said traffic volume is associated with a session
2 initiated by said user.